



# PHYSICAL FITNESS FOR A STRONGER AMERICA



a basic exercise sequence for developing physical  
fitness through a *Circuit Training* program



*Prepared for the President's Council on Physical Fitness and Sports by the*



# Why an Active Physical Fitness Program is Essential to the Strength of our Nation...

THE WHITE HOUSE  
WASHINGTON

There are few sights more thrilling than the performance of a star athlete: O. J. Simpson breaking through the line for a long run, Arnold Palmer smashing one long and high and straight down the fairway, Wilt Chamberlain grabbing a rebound beneath the boards.

But it is even more thrilling to discover our own level of physical performance, our own peak of fitness, to engage in programs and sports which call into play not only our muscles but our spirit.

For the young, physical fitness can and should mean more than the ability to participate in a sport; it can be a new sense of personal esteem, a pride in performance which extends far beyond the activity itself, a road to healthy growth and development of the body and the mind.

For the adult, it can often mean the difference between life and death. In this age of mechanization and automation, a program of physical fitness can restore and preserve the energy and endurance and sense of well-being which too often are missing in an increasingly sedentary way of life.

Our national goal is not to make every citizen an athlete, but to encourage every citizen to become aware of the pleasure and the challenge of physical fitness. In this way our fitness programs can make a significant contribution to the quality of our national life.



Richard M. Nixon

"Our own history, perhaps better than the history of any other great country, vividly demonstrates the truth of the belief that physical vigor and health are essential accompaniments to the qualities of intellect and spirit on which a nation is built."

JOHN F. KENNEDY

"During my many years in baseball, I saw a lot of great prospects come up to the major leagues and then drop out of sight in a few years. The people who stayed around and did the job were those who kept themselves in shape. It's my observation that the same thing is true in all walks of life."

TED WILLIAMS  
*Chairman, Sears Sports Advisory Staff*

"There simply isn't any way to be fully effective—in sports, in politics, or in any other human endeavor—while operating at half-strength or half-speed. Physical fitness influences intellectual performance in the same subtle way that mental attitude affects athletic performance."

ROBERT B. MATHIAS, M.C.  
*Member, Sears Sports Advisory Staff*

"During 25 years of teaching experience, I found that there is an undeniable correlation between physical fitness and mental fitness."

DR. HOLLIS L. CASWELL,  
*Former President, Teachers College, Columbia University*

"The exercise factor is one of the most important, and the most neglected, of the practices individuals should utilize to enjoy the added years science is making possible. It begins to appear that exercise is the master conditioner for the healthy and the major therapy for the ill."

EDWARD L. BORTZ, M. D.  
*Former President, The American Medical Association*



# Physical Fitness Thru Circuit Training

## ***What Is Circuit Training?***

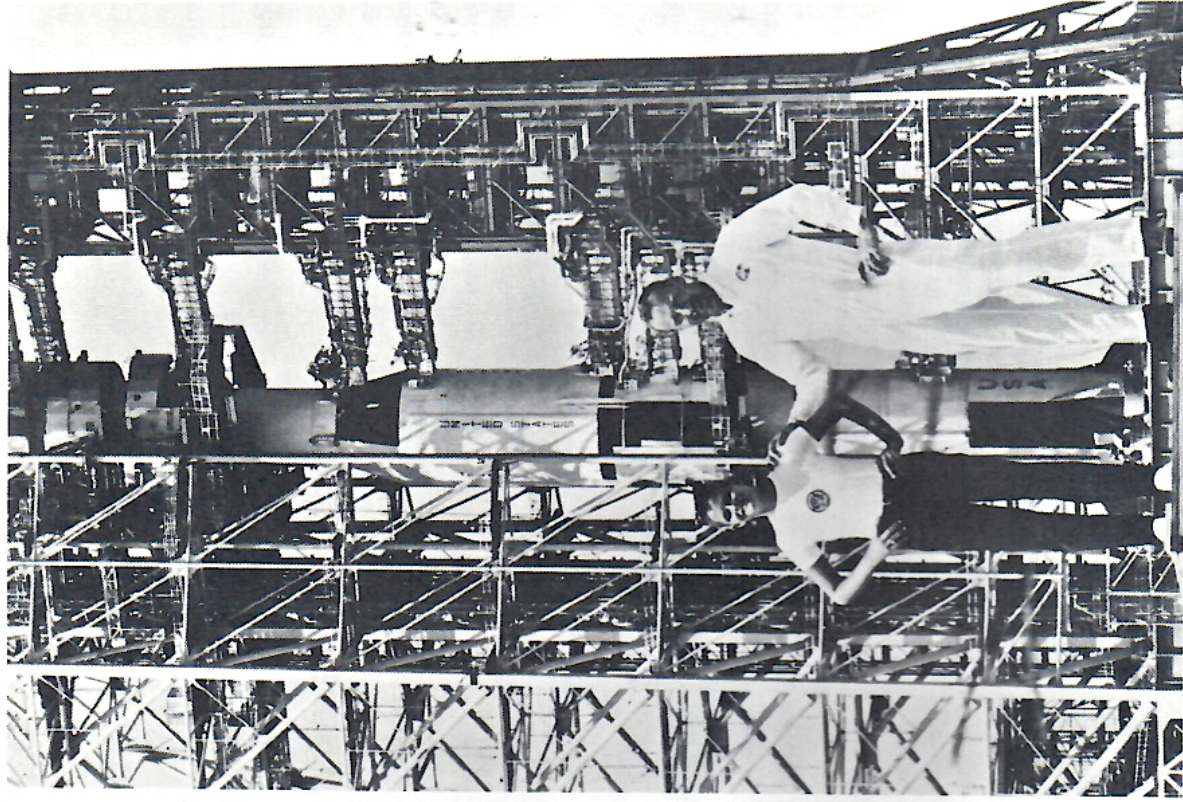
Circuit training is a modern method of physical conditioning which offers an interesting and exciting challenge. Equipment and facilities are utilized in ways which permit the participant to get a complete workout and engage in a variety of activities in a limited time. Circuit training gets its name from the fact that the participant makes one or more trips around a prescribed course, stopping at each station along the way to perform various exercises.

Circuits can be set up without equipment, but gymnasium, playground and athletic apparatus generally is used. The difficulty of the circuit can be increased or decreased to fit the needs of individuals or groups. If equipment and exercises are properly selected, a 10 or 12-station course can be used to condition the cardiorespiratory system and all of the body's major muscle groups.

The circuit illustrated in this booklet was developed by the President's Council on Physical Fitness and Sports primarily for use in schools and colleges and universities. However, it is easily adapted for use by YMCAs, athletic clubs, boys' clubs and other groups.

*James E. Lowell*

*Consultant to the President  
on Physical Fitness and Sports  
NASA Astronaut*

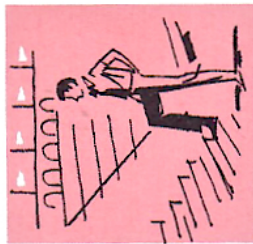
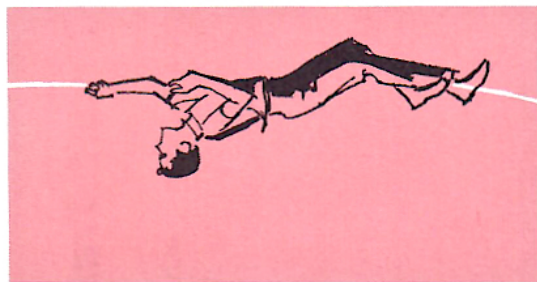




## 1. ROPE CLIMB

## 2. HORIZONTAL LADDER

## 3. STADIUM STEPS



## Adapting the Circuit to Local Conditions

The imaginative teacher or leader can think of hundreds of variations on the circuit that will accomplish the desired purposes and yet adapt to existing facilities and conditions. The limitless opportunities of using interesting adaptations for physical conditioning are among the great advantages of the circuit training method. Climbing ropes, horizontal ladders, bleacher or stadium seats, balance beams, uneven terrain are but a few examples of exercise stations, other than those given in this booklet, which can be incorporated into a "home-made" circuit. A variety of calisthenics and stunts also can be employed, as well as various forms of locomotion, e.g. hopping, jumping, zig-zag running and the like.

# THE CIRCUIT TRAINING METHOD

pages and the complete layout is illustrated above and on the outside back cover.

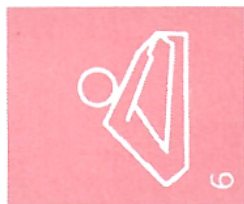
## Adjusting the Workloads

Three variables—exercise loads, repetitions and time—can be used to add interest and challenge to the circuit. The supervisor may want to set a specified time for completing one or more circuits, or he may establish a time limit and see how many circuits the participants can complete during that period. In this program, 12 minutes is allowed for the workout and participants attempt to complete the circuit as many times as possible. Difficulty of the circuit can be increased by increasing repetitions and exercise loads.

## Laying Out the Course

The circuit may be set up anywhere space is available, indoors or out. Gymnasiums and playing fields usually are the best locations. Exercise stations should be arranged in a circuit around the field or gymnasium floor and numbered consecutively. Leave an open running lane around the perimeter of the exercise area and leave enough space between stations so that participants do not interfere with each other.

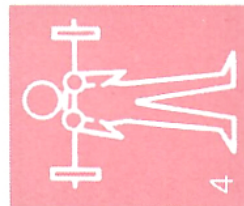
The course described in this publication utilizes twelve stations which together provide a vigorous and well-rounded workout. These stations can be set up indoors or out. Specific instructions for each station are given on the following



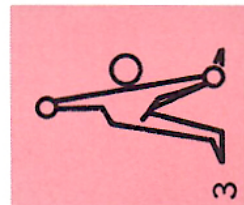
6



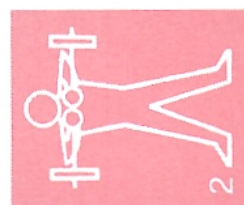
5



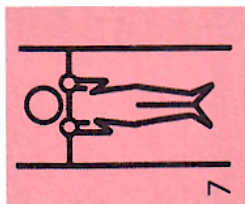
4



3



2



7



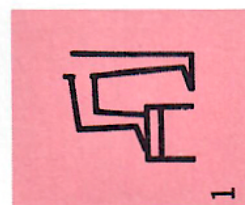
8



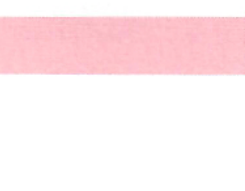
9



10



11



12

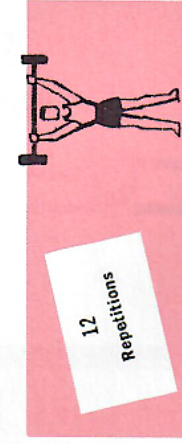


# How to Set Up and Conduct This Program for any Group

## STEP 1

### Setting Goals

Before goals can be set, a certain amount of testing and experimentation with the individuals or groups involved is necessary. In heavy resistance exercises such as bar dips, weight-lifting and pullups, the goal should be approximately half the number of repetitions the performer can do in a 30-second test. In endurance exercises such as the bench step, sprinter and squat thrust, the goal should be half the repetitions the performer can do in a one-minute test. Goals should be revised upward as performance improves.



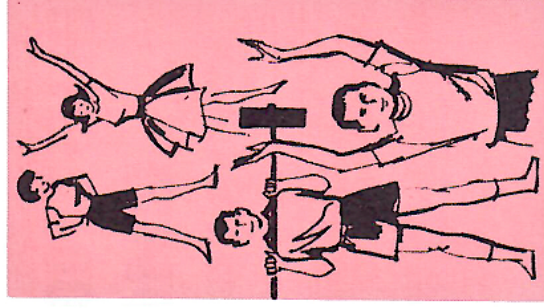
Suggested goals for different age groups will be found at the bottom of each card on the following pages. There are two suggested levels of performance—red and black. The red goals are for beginners, the black for advanced performers.

## STEP 2

### How to Start

The 12-station circuit will accommodate 48 participants performing simultaneously and continuously. Before starting, each participant should be instructed to make certain that he can perform each exercise properly and safely.

At the beginning of the workout, there should be four or fewer performers at each of the 12 stations. On the command "Ready . . . Go!" the performers begin the exercises, working independently of each other. Each keeps count of his (or her) repetitions and stays at each station until the exercises have been completed, even if this requires resting between repetitions. At the end of 12 minutes the command to stop is given and each performer reports the number of circuits and stations completed. Some instructors place student leaders at the stations to assure that exercises are performed properly.



## NOTE:

The "Cards" illustrated on the following pages have been reduced from 14 x 22-inch size. Please see page 18 of this booklet for reproduction specifications and suggestions.



# 1

## BENCH STEP

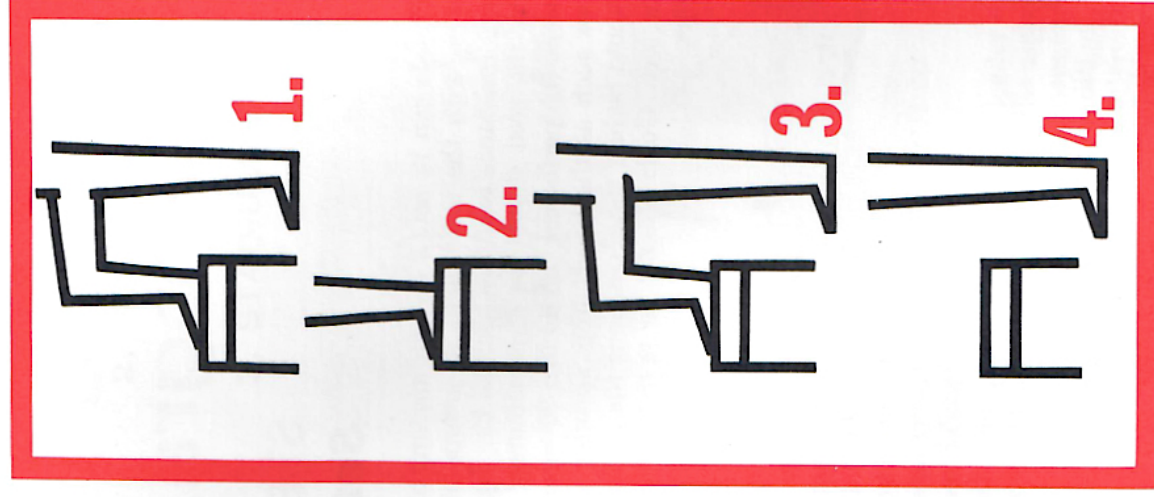
### ACTION:

1. PLACE RIGHT FOOT ON BENCH.
2. BRING LEFT UP AND STAND ERECT.
3. LOWER RIGHT FOOT TO FLOOR.
4. LOWER LEFT FOOT TO FLOOR.

GOAL- ☐ COMPLETE TRIPS

GOAL- ☐ COMPLETE TRIPS

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 **SEARS SPORTS CENTER**  
Where the new ideas are



### SUGGESTED GOALS

1. Grades 4-6
2. Grades 7-9

3. Grades 10-12
4. College and above

- Black—15 trips
- Red—10 trips
- Black—20 trips
- Red—15 trips

## CARD 1

Use a bench with a firm foundation large enough to accommodate six performers at once. The height of the bench should be approximately 15 inches.



# 2

## UPRIGHT ROWING

### ACTION:

1. PULL BAR TO CHIN, HOLD ELBOWS HIGH.
2. RETURN TO STARTING POSITION.

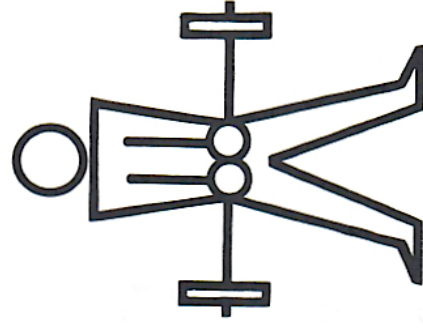
GOAL-  REPETITIONS

GOAL-  REPETITIONS

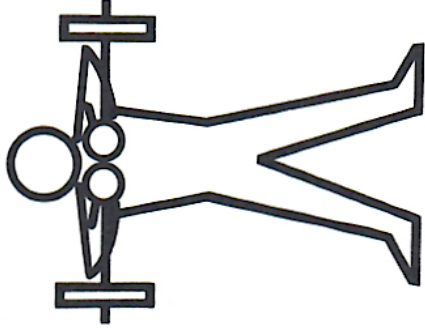


PREPARED FOR THE PRESIDENT'S COUNCIL on PHYSICAL FITNESS AND SPORTS by

When the sun starts to



START



ACTION

### SUGGESTED GOALS

	Repetitions	Weight		Repetitions	Weight
1. Grades 4-6	6	20	Black	10	40
	4	20	Red	6	30
2. Grades 7-9	8	25	Black	10	60
	6	20	Red	6	40

## CARD 2

Each performer should be thoroughly instructed in the proper procedure for doing the weight training exercises. Student leaders should be present at all weight-lifting stations to assure safe, correct performance. A minimum of 4 barbells should be available.



# 3

## WINDMILL and JOG

### ACTION:

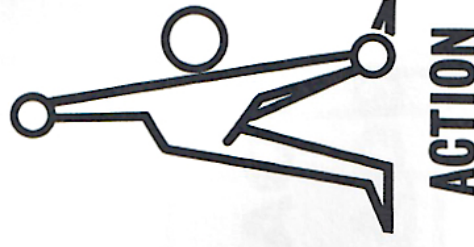
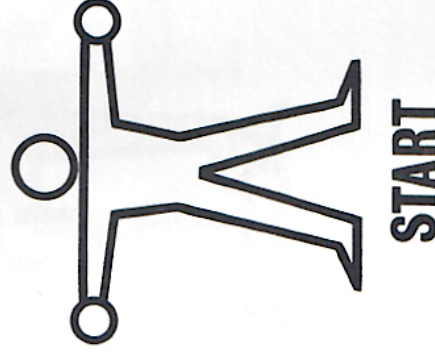
1. BEND AND TWIST TRUNK, TOUCHING RIGHT HAND TO LEFT TOE.
2. RETURN TO STARTING POSITION.
3. & 4. SAME ACTION TO OTHER SIDE.

GOAL - ☐ REPETITIONS

GOAL - ☐ REPETITIONS

PLUS: **ALL JOG ONE LAP**

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
Sears Sports Center  
When the sun is out



#### SUGGESTED GOALS

1. Grades 4-6
2. Grades 7-9

Black-6  
Red-4  
Black-8  
Red-6

3. Grades 10-12

Black-10  
Red-8  
Black-12  
Red-10

4. College and above

## CARD 3

The jog is performed outside the perimeter of the circuit. This is not a sprint.

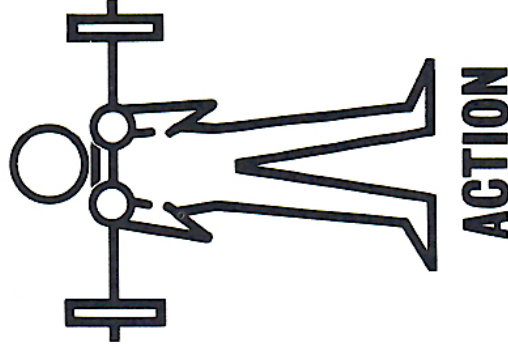
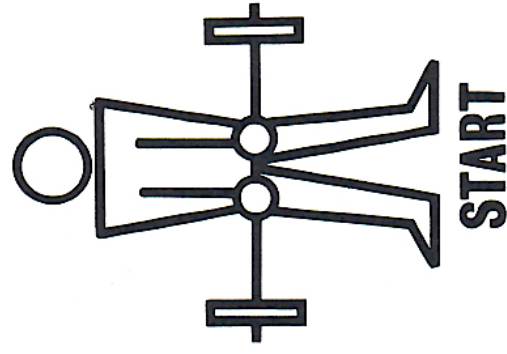


# 4

## TWO HAND CURL

### ACTION:

1. CURL BAR UPWARD TO CHIN,  
BEND ARMS AT ELBOW.
2. RETURN TO STARTING POSITION.



GOAL-  REPETITIONS

GOAL-  REPETITIONS



PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS BY

### SUGGESTED GOALS

1. Grades 4-6
2. Grades 7-9

Black  
Red

Repetitions  
Weight

3. Grades 10-12
4. College and above

Black  
Red

Repetitions  
Weight

10 40  
6 30  
10 60  
6 40

CARD 4

In the starting position the palms face away from body. A minimum of 4 barbells should be available. Student leaders should be present at all weight-lifting stations to assure safe, correct performance.






# SPRINTER

## ACTION:

1. REVERSE POSITION OF FEET.
2. REVERSE POSITION OF FEET.

GOAL-  REPETITIONS

GOAL-  REPETITIONS

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 SEARS SPORTS CENTER  
Where the sport ideas are



START



ACTION

### SUGGESTED GOALS

- |               |          |                      |          |
|---------------|----------|----------------------|----------|
| 1. Grades 4-6 | Black-8  | 3. Grades 10-12      | Black-16 |
|               | Red-4    |                      | Red-12   |
| 2. Grades 7-9 | Black-12 | 4. College and above | Black-20 |
|               | Red-8    |                      | Red-16   |

## CARD 5

The back and extended leg should form a straight line. Insist on proper performance.



# 6 SIT-UPS and JOG

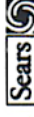
## ACTION:

1. ROLL UP TO SITTING POSITION.
2. ROLL BACK TO STARTING POSITION.

GOAL-  REPETITIONS

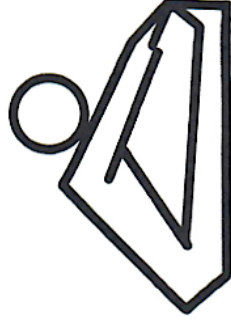
GOAL-  REPETITIONS

PLUS: **ALL JOG ONE LAP**

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 **Scars SPORTS CENTER**  
What do you think we



START



ACTION

1. Grades 4-6
2. Grades 7-9

## SUGGESTED GOALS

- |          |                      |          |
|----------|----------------------|----------|
| Black—14 | 3. Grades 10-12      | Black—18 |
| Red—9    |                      | Red—13   |
| Black—16 | 4. College and above | Black—20 |
| Red—11   |                      | Red—15   |

CARD 6

The performer should attempt to touch toes if possible. Jog once around circuit before moving to next station.



7

# PULL-UPS

GOAL-  OVERHAND

# BENT ARM HANG

GOAL-  SECONDS

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 SEAS CENTER  
 Where the new ideas are

## SUGGESTED GOALS

	Pullup	Bent Arm Hang		Pullup	Bent Arm Hang
1. Grades 4-6	Black 3 Red 1	12 seconds 6 seconds	3. Grades 10-12	Black 6 Red 3	16 seconds 8 seconds
2. Grades 7-9	Black 4 Red 2	14 seconds 6 seconds	4. College and above	Black 7 Red 4	22 seconds 9 seconds

An overhand grip, palms facing away from body is used for both the pull-up and the bent arm hang. Performers should count seconds aloud.

CARD 7




# 8

## SQUAT THRUST

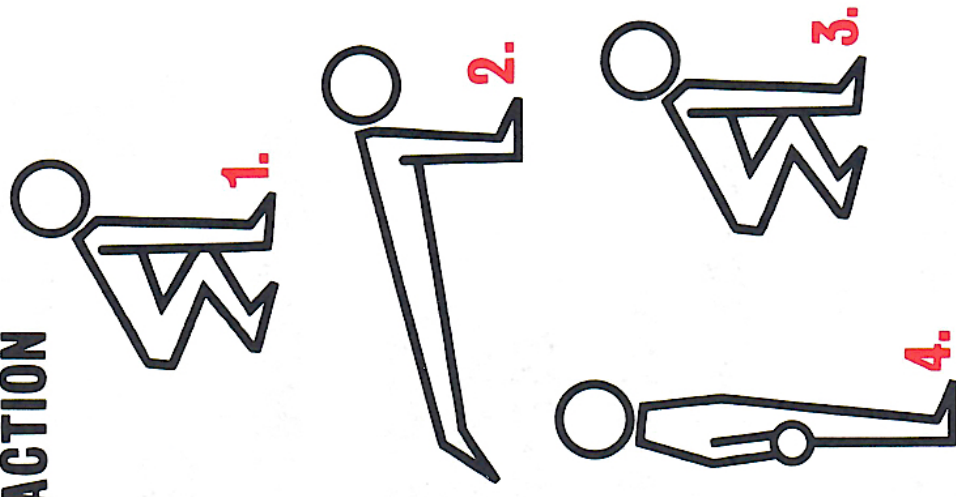
### ACTION:

1. BEND KNEES PLACE HANDS ON FLOOR.
2. THRUST LEGS BACKWARD.
3. RETURN TO SQUAT POSITION.
4. RETURN TO ERECT POSITION.

GOAL- ☐ REPETITIONS  
GOAL- ☐ REPETITIONS

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  

 SEALS OF THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS

### ACTION



### SUGGESTED GOALS

1. Grades 4-6
2. Grades 7-9

3. Grades 10-12
4. College and above

## CARD 8

The performer must come to an erect position at the completion of each squat thrust. The back and legs should form a straight line when in the extended position.



# 9

## SIDE STRADDLE HOP and JOG

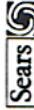
### ACTION:

1. SWING ARMS UPWARD AND TOUCH OVERHEAD WHILE MOVING FEET SIDEWARD AND APART.
2. RETURN TO STARTING POSITION.

GOAL— ☐ REPETITIONS

GOAL— ☐ REPETITIONS

PLUS: **ALL JOG ONE LAP**

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 SCARS SPORTS CENTER  
 What do you think we

#### SUGGESTED GOALS

1. Grades 4-6
2. Grades 7-9

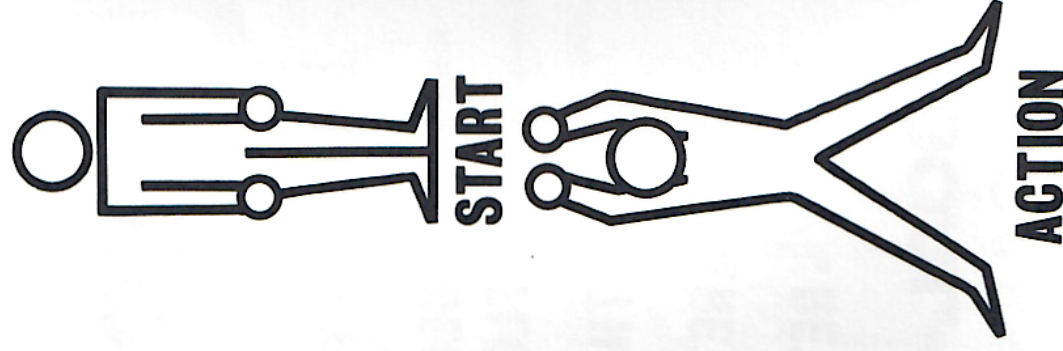
3. Grades 10-12
4. College and above

- Black—10
- Red—6
- Black—12
- Red—8

- Black—16
- Red—12
- Black—20
- Red—16

## CARD 9

Insist on good technique in the performance of the side straddle hop. Jog once around circuit before moving to next station.





# 10


## STANDING PRESS

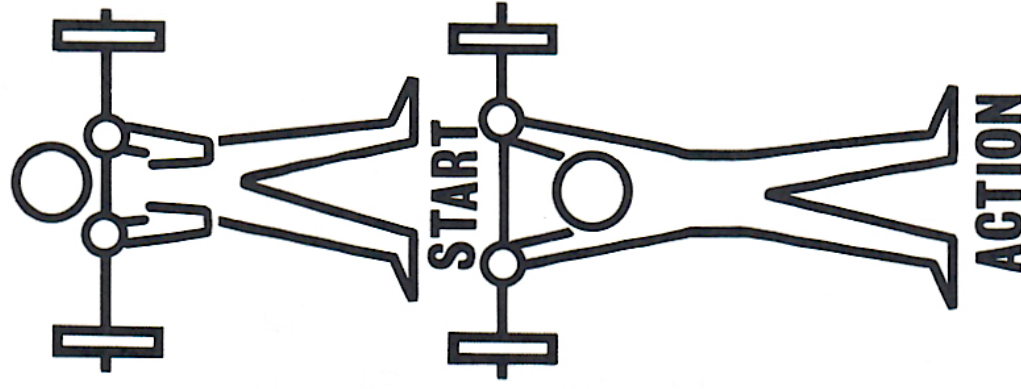
### ACTION:

1. PRESS WEIGHT OVER HEAD.
2. RETURN TO STARTING POSITION.

GOAL- ☐ REPETITIONS

GOAL- ☐ REPETITIONS

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 Sears  
 SPORTS CENTER  
 Where the new ideas are



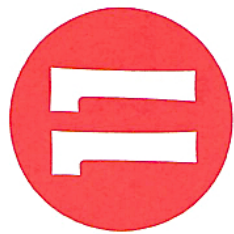
### SUGGESTED GOALS

	Repetitions	Weight		Repetitions	Weight
1. Grades 4-6	6	15 lbs.	3. Grades 10-12	8	30 lbs.
	4	10 lbs.	Black	4	15 lbs.
2. Grades 7-9	8	20 lbs.	Red	8	45 lbs.
	4	15 lbs.	Black	4	20 lbs.
			Red		

Each performer should receive individual instruction in the techniques of doing this exercise and proper "spotting" methods. Student leader should be present at all weight-lifting stations to assure safe, correct performance. A minimum of 4 barbells should be available.

## CARD 10






# TRUNK TWISTER

## ACTION:

1. BEND FORWARD FROM WAIST.
2. TWIST TRUNK TO RIGHT.
3. BEND TRUNK BACKWARD.
4. TWIST TRUNK TO LEFT.

GOAL—☐ EACH WAY

GOAL—☐ EACH WAY

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 **Seas**  
SPORTS CENTER  
Where the new ideas are

## SUGGESTED GOALS

1. Grades 4-6
2. Grades 7-9

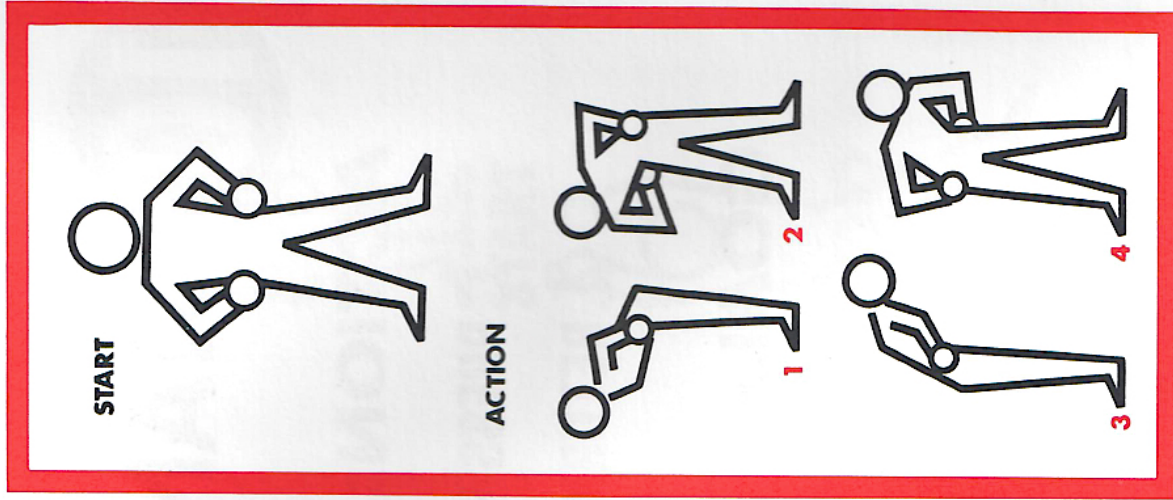
Black—5 each way  
Red—5 each way  
Black—5 each way  
Red—5 each way

3. Grades 10-12
4. College and above

Black—5 each way  
Red—5 each way  
Black—5 each way  
Red—5 each way

## CARD 11

Performance goals are identical for all groups for the trunk twister. Stress technique improvement.





# 12

## BAR DIPS and JOG

### ACTION:

1. HAND SUPPORT POSITION.
2. LOWER BODY BY BENDING ARMS.
3. RETURN TO STARTING POSITION.

GOAL- ☐ REPETITIONS


## KNEE PUSH-UPS and JOG

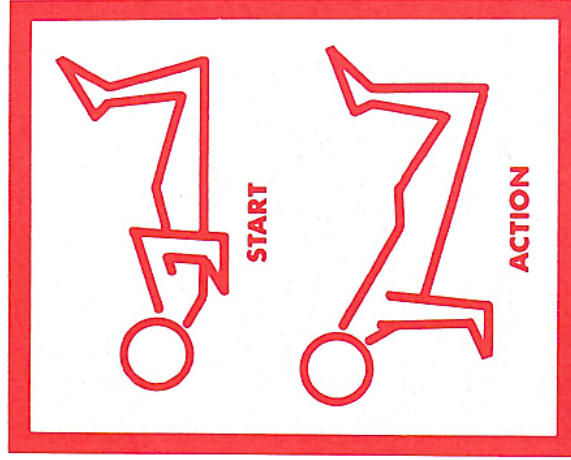
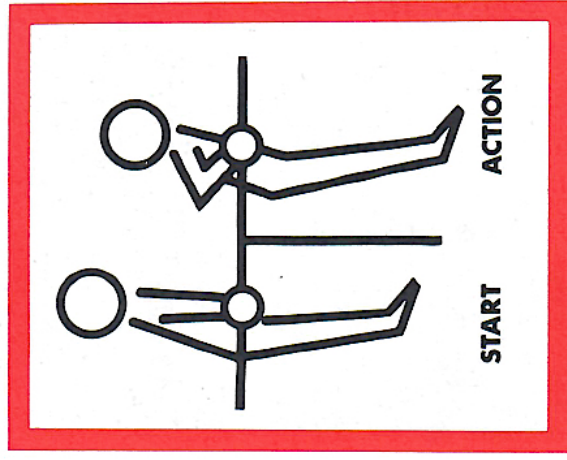
### ACTION:

1. EXTEND ARMS — RAISE BODY
2. LOWER BODY SO CHEST TOUCHES FLOOR

GOAL- ☐ REPETITIONS

PLUS: **ALL JOG ONE LAP**

PREPARED FOR THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS by  
 **Sears SPORTS CENTER**  
 Where the new ideas are.



### SUGGESTED GOALS

	Bar Dips	Bent Knee Pushups		Bar Dips	Bent Knee Pushups
1. Grades 4-6	Black 4 Red 2	6 4	3. Grades 10-12	Black 8 Red 4	12 8
2. Grades 7-9	Black 6 Red 3	8 6	4. College and above	Black 10 Red 5	20 10

Jog once around circuit before moving to next station.

## CARD 12



# HOW TO REPRODUCE THESE "CARDS" FOR USE IN YOUR PROGRAM

A set of "cards" will give you a complete, 12-station training circuit. All you need do is enlarge the cards exactly as they are shown on the pages of this booklet. At right, are some suggested methods of production. The cards should be made large enough for group use. Make sure that your students will be able to read them easily.

## SIZE RECOMMENDATION

14x22-inches is an ideal size card for most circuit training groups. Every element is easy-to-read at this size yet the cards are easy to handle and store.

## MOUNT OR PRINT ON HEAVY CARDSTOCK

55-point board provides about the sturdiness you need to make the cards withstand much handling. You can work directly on board or on a paper stock which is then laminated.

## PROTECTIVE COATING

Fingerprints, smudges and moisture can ruin your cards in a short time unless you coat them well. Printers can apply a plastic coating or you can use any clear plastic spray.

## REPRODUCTION METHODS

### — within a school

#### 1. SCHOOL ART CLASS

This is an ideal project for an intermediate class. Accuracy and neatness should be stressed.

#### 2. SCHOOL PRINT SHOP

Simple, 2-color line work makes this interesting to your print shop. In a letterpress shop, the art class would probably be required to do the figures.

#### 3. SCHOOL PHOTO LAB

Photographic enlargements mounted on boards will give you a fine, 1-color set of circuit training cards. Tinting could be added where desired.

#### 4. PROJECTION TECHNIQUES

A 35mm or view-graph projector will let you show individual cards of the circuit training program. This is advisable only if the group is small as it defeats the "circuit" aspect of the program.

### — outside methods

#### 1. LOCAL PRINTER

Offset printers can easily duplicate the cards for your circuit training program. The printing can be on plastic, card stock or paper mounted to a heavy cardboard.

#### 2. PHOTOSTAT SHOP

Enlarged stats can be made from these pages and mounted on heavy card stock. You should coat these stats with a plastic spray.

#### 3. SIGN SHOP

A single set can probably be produced inexpensively by your local commercial sign shop. The copy can be typeset or handlettered.

**QUANTITY PRODUCTION** State or regional school organizations should consider mass production of these cards. This is the best way to assure proper usage and full participation and it makes the cards quite economical.

Many civic and trade associations have programs for our young. Contact them; see if they would be interested in underwriting the cost of producing these cards for the good of the health and welfare of tomorrow's citizens.



## These Sears films

are available to you  
on a **FREE LOAN** basis

Produced by Sears, Roebuck and Co. as a public service feature to meet the needs of school and youth groups, adult clubs and civic organizations, the films listed in this catalog are available on a **FREE LOAN** basis. The only cost to the user is film postage from and to our film distributor's regional office. When you request films, please give as much advance notice as possible and provide alternate dates. While every effort will be made to schedule films for the dates requested, it is sometimes necessary to ship alternate dates due to heavy bookings.

## SEARS, ROEBUCK AND CO.

Public Relations Department  
Department 703

7401 Skokie Blvd., Skokie, Ill. 60076

## HIGH IN THE HIMALAYAS

**27 Minutes**  
*Color*  
Join famed explorer Sir Edmund Hillary as his expedition goes high into the Himalayan Mountains tackling the icy mountain slopes to build a schoolhouse for the children of the village.  
#S250

## COME CAMPING IN ALASKA

**33 Minutes**  
*Color*  
Enjoy the scenic grandeur of our 50th state and share the experiences of Sir Edmund Hillary and his family on a 10,000 mile camping trip to Alaska, the "roof of North America."  
#S690

## AMERICA GOES CAMPING

**28 Minutes**  
*Color*  
The fun experienced by a typical group of campers is highlighted by special appearances of Ted Williams, Shirley Englehorn, and Adolph Kieffer in this film on modern family camping and travel.  
#S453

## LET'S GO FISHING IN THE NORTHLAND

**25 Minutes**  
*Color*  
Amid the natural Fall beauty of the border lakes, an expert and an amateur seek the wily bass in a film which includes underwater photography of the fish striking.  
#S958

## GROUSE HUNTING WITH TED WILLIAMS

**21 Minutes**  
*Color*  
In the sand hills of Western Nebraska, sportsman Ted Williams takes you along as he seeks out wily, sharp-tail and square-tail grouse in an exciting sports film.  
#S249

## TARPON FISHING WITH TED WILLIAMS

**28 Minutes**  
*Color*  
There's fast action off the Florida Keys as Ted Williams boats a 130-lb. tarpon. Plugcasting, spincasting and fly rigs are shown in use in numerous fishing spots.  
#S959

## WONDERFUL WATERWAYS

**21 Minutes**  
*Color*  
All the fun and thrills of water sports—canoeing, swimming, water skiing and pleasure boating—are highlighted with Olympic swimming champ Adolph Kieffer.  
#S929

# Additional materials available from the President's Council



**VIM**, a complete exercise plan for girls 12 to 18. 25¢ each, \$18.75 per hundred.

**VIGOR**, a complete exercise plan for boys 12 to 18. 25¢ each, \$18.75 per hundred.

**ADULT PHYSICAL FITNESS**, complete exercise programs for men and women. 35¢ each, \$26.25 per hundred.

**YOUTH PHYSICAL FITNESS**, suggestions for a basic school fitness program and a comprehensive health and physical education program. 40¢ each, \$30 per hundred.

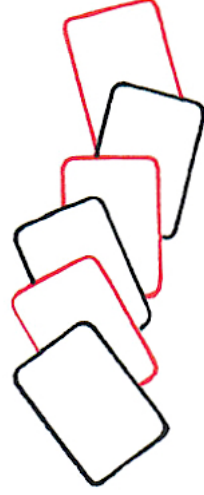
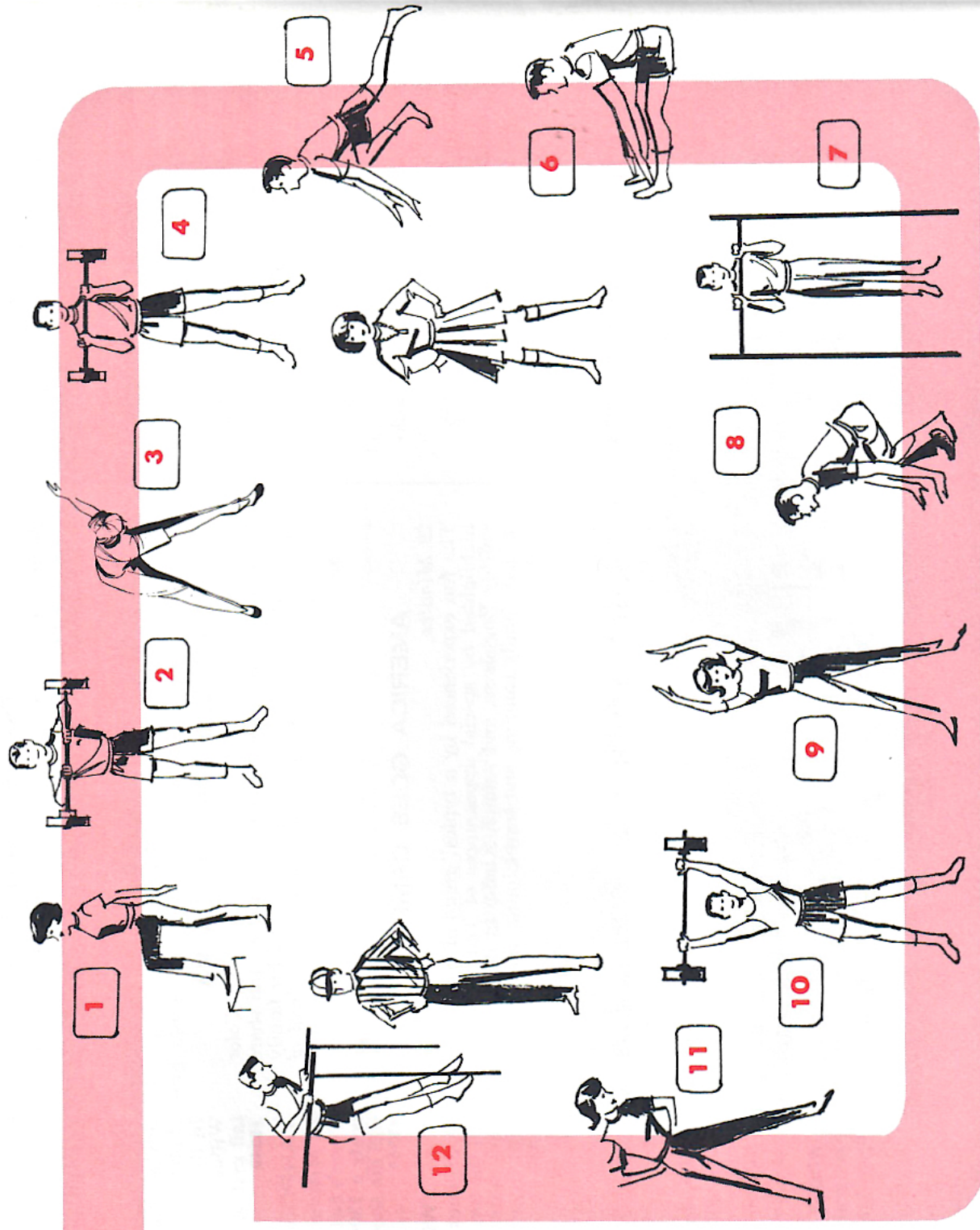
**THE FITNESS CHALLENGE IN THE LATER YEARS**, a graded exercise plan for elderly men and women. 30¢ each, \$22.50 per hundred.

Address all orders to: Superintendent of Documents  
U. S. Government Printing Office  
Washington, D.C., 20402



# CIRCUIT TRAINING

a dynamic tool  
for improving  
the fitness of  
**AMERICA'S  
YOUTH**  
at the time of  
greatest need—  
**TODAY!**



Prepared for the President's Council  
on Physical Fitness and Sports by the  
Sears Sports Center  
Where the new ideas are  
Courtesy of Sears, Roebuck and Company.